

What Is Claimed Is:

1. An image processing circuit, comprising:  
a color sensitivity correction circuit which adds or subtracts a predetermined offset to or from a pixel signal  
5 obtained, for each column, by amplifying photoelectric conversion signals of pixels, and multiplies the result by a predetermined gain, said pixels having a photoelectric conversion element respectively and being arranged in column and row directions,  
10 wherein said predetermined offset includes, a first offset which is set according to each color, and a second offset which is set according to a plurality of columns.
2. The image processing circuit according to Claim 1,  
15 wherein said color sensitivity correction circuit further comprises a first offset table where said first offset is stored, and a second offset table where said second offset is stored, and the first and second offsets which are output from said first and second offset tables are added to or  
20 subtracted from said pixel signals.
3. The image processing circuit according to Claim 1,  
wherein said color sensitivity correction circuit further comprises an offset table having an offset combining said  
25 first offset and second offset, and the offset which is output from said offset table is added to or subtracted from said pixel signals.

4. The image processing circuit according to Claim 1,  
wherein said color sensitivity correction circuit further  
comprises an offset adjustment section for adjusting said  
5 second offset according to brightness of at least one frame  
of an image.

5. The image processing circuit according to Claim 4,  
wherein said offset adjustment section adjusts the second  
10 offset to be larger when the image has a higher brightness,  
and adjusts the second offset to be smaller when the image  
has a lower brightness.

6. The image processing circuit according to Claim 4,  
15 wherein said offset adjustment section adjusts said second  
offset to be larger when a gain of said amplifier is smaller,  
and adjusts said second offset to be smaller when the gain of  
said amplifier is larger, according to the gain of the  
amplifier which amplifies said image signals corresponding to  
20 at least one frame of an image.

7. The image processing circuit according to Claim 1,  
wherein said color sensitivity correction circuit further  
comprises an offset generation section which compares pixel  
25 signals for each column with a reference value corresponding  
to brightness of at least one frame of an image, and  
dynamically generates the second offset according to the

result of the comparison.

8. The image processing circuit according to Claim 7,  
wherein said reference value is determined based on a gain of  
5 an amplifier for amplifying said image signals corresponding  
to at least one frame of an image.

9. An image processing circuit, comprising:  
a correction circuit for or adding or subtracting an  
10 offset for each column, which is set according to a plurality  
of columns, to or from pixel signals obtained for each column  
by amplifying photoelectric conversion signals of pixels,  
said pixels having photoelectric conversion elements and  
being arranged in column and row directions.

15  
10. The image processing circuit according to Claim 9,  
wherein said correction circuit adds or subtracts an offset  
for each color, which is set for each color, to or from said  
pixel signals, and multiplies the result by a gain which is  
20 set for each color.

11. The image processing circuit according to Claim 10,  
wherein said correction circuit further comprises an offset  
table for storing the offset for each column, and adds or  
25 subtracts the offset for each column which is output from  
said offset table to or from said pixel signals.

12. The image sensor according to Claim 11, wherein said correction circuit further comprises an offset adjustment section for adjusting said offset for each column according to brightness of at least one frame of an image.

5

13. The image sensor according to Claim 11, wherein said correction circuit further comprises an offset generation section which compares the pixel signals for each column with a reference value corresponding to brightness of at least one frame of an image, generates said offset for each column dynamically according to the result of the comparison, and stores the generated offset in said offset table.

10

14. The image processing circuit according to Claim 12, wherein said offset adjustment section adjusts said offset for each column based on a gain of an amplifier for amplifying said image signals corresponding to at least one frame of an image.

15

15. The image processing circuit according to Claim 13, wherein said reference value is determined based on a gain of an amplifier for amplifying said image signals corresponding to at least one frame of an image.

20

16. A color image sensor, comprising:

25

the image processing circuit according to any of Claim 1 to Claim 15;

a pixel array where said pixels are arranged in column and row directions; and

a column output circuit which is disposed for each column, amplifies the photoelectric conversion signals of  
5 said pixels arranged in the column direction; and outputs said image signals.